

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

**FIRST SUPPLEMENTAL COMPLAINT OF PLAINTIFFS COALITION
FOR GOOD GOVERNANCE, LAURA DIGGES, WILLIAM DIGGES III,
RICARDO DAVIS, AND MEGAN MISSETT**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	PARTIES	5
A.	Plaintiffs	5
1.	Plaintiff Coalition for Good Governance.....	5
2.	Coalition’s Member Plaintiffs.....	5
B.	Defendants	5
1.	Defendants Secretary of State.....	5
2.	Defendant State Board Members	5
3.	Defendant Fulton Board Members	6
III.	JURISDICTION AND VENUE.....	6
IV.	APPLICABLE LAW GOVERNING THE DOMINION BMD SYSTEM	6
A.	<u>2019</u> HB 316’s Key Changes to Georgia’s Election Code	6
B.	Georgia’s Voting System Certification Process.....	8
1.	Qualification Testing	9
2.	Certification Tests	11
C.	Functional Requirements for BMD Voting Systems	12
V.	GENERAL ALLEGATIONS	18
A.	How Voting Works on the Dominion BMD System	18
B.	Certification and Award	24

C.	The Dominion BMD System Is Constitutionally Defective and Not a Lawful Replacement for DRE System	25
D.	The Upcoming BMD Elections	27
VI.	REQUIRING VOTERS TO USE THE DOMINION BMD SYSTEM SEVERELY BURDENS THE RIGHTS OF GEORGIA VOTERS	28
A.	The Dominion BMD System Forces In-Person Voters to Cast Ballots Without Being Able to Read or Verify The QR-Encoded Votes They Are Casting	28
B.	Many In-Person Voters Will Be Unable to Verify Even the Human Readable Text Portions of Their Dominion BMD Ballots	31
C.	Ballots Cast on the Dominion BMD System Are Not Secret Ballots	34
D.	The Dominion BMD System Does Not Create An Independent, Accountable Record of Voters’ Choices	36
E.	The Design of the Dominion BMD System Deprives Officials of Any Way to Confirm Equipment Malfunctions	38
F.	Audits Examine Different Expressions of Voter Intent Than Official Counts—But Only for In-Person Voters	39
G.	The Dominion BMD System Is Illegal To Use Because the Secretary’s Improper Certification of the System Is Void	41
1.	Qualification Testing Has Not Been Performed As Required By the Certification Rule	41
2.	Certification Testing Has Not Been Performed As Required By the Certification Rule	43
3.	The Secretary’s Certification of the Dominion BMD System Is Void and the System Is Not Legal to Use in Georgia	44

H.	The State’s Electronic Security Practices Render the BMD System Even More Vulnerable to Hacking and Malicious Manipulation Than The DRE System Was	45
1.	QR Codes Create Inherently High-Risk Applications	45
2.	The Dominion BMD System Will Inevitably Be Exposed to Compromised Components of the DRE System That Have Still Never Been Examined for, Much Less Cleansed of, Malware	48
3.	The State Has Still Not Improved Its Computer Security Practices, So New Exposures to Hacking and Malicious Manipulation Are All But Certain to Occur	51
I.	Implementation of the BMD System in Time to Conduct the Upcoming BMD Elections Is Impractical, Exposing Georgia Voters to Electoral Disaster	52
1.	The Scale of Georgia’s Implementation Task Is Unprecedented	52
2.	Implementation Will Inevitably Be Delayed By the State’s Required Re-Examination of the Dominion BMD System	55
VII.	STANDING	56
A.	Standing of the Member Plaintiffs	57
1.	Imminent Threat of Injury-in-Fact	57
2.	Causation	59
3.	Redressability	59
B.	Standing of Coalition	59
1.	Associational standing	59
a)	Members have standing to sue in their own right	60

b)	Interests at stake are germane to organization’s purpose	60
c)	Neither claim nor relief requires participation of individual members	61
2.	Organizational standing	61
a)	Injury-in-Fact	61
b)	Causation	62
c)	Redressability	62
VIII.	CLAIMS	62
	COUNT I: FUNDAMENTAL RIGHT TO VOTE	62
	COUNT II: EQUAL PROTECTION	65
	COUNT III: DUE PROCESS	67
IX.	PRAYER FOR RELIEF	69

Pursuant to Rule 15(d) of the Federal Rules of Civil Procedure, the Coalition Plaintiffs,¹ in this supplemental complaint, hereby set out the following transactions, occurrences, and events that happened after the relation-back date of the Coalition Plaintiffs' Third Amended Complaint (the "**TAC**," [Doc. 226](#)). The allegations and claims stated by this supplemental complaint are additional to, and do not supersede or replace, the allegations and claims stated in the TAC.

I. INTRODUCTION

1. This Court held on September 17, 2018, that the U.S. Constitution requires "transparent, fair, accurate, and verifiable election processes that guarantee each citizen's fundamental right to cast an accountable vote." *Curling v. Kemp*, [334 F. Supp. 3d 1303](#), *aff'd in part, appeal dismissed in part*, No. 18-13951, [2019 WL 480034](#) (11th Cir. Feb. 7, 2019).

2. Counsel for the State Defendants subsequently told this Court on the record that the State of Georgia "took that [order] to heart"—specifically, by adopting legislation switching the state to a voting system that uses "ballot marking devices" ("**BMDs**"). According to counsel for the State, the new legislation:

¹ The "**Coalition Plaintiffs**" are individual Plaintiffs LAURA DIGGES, WILLIAM DIGGES III, RICARDO DAVIS, and MEGAN MISSETT (the "**Member Plaintiffs**"), together with organizational Plaintiff COALITION FOR GOOD GOVERNANCE ("**Coalition**").

changes a number of areas of the Georgia Election Code but with respect to this case specifically the DRE issue and allows the state to implement new voting machines and a new voting system—a back end system also that will address—it addresses the concerns of the Court with the outdated machines.

(Tr. Status Conf. (Apr. 9, 2019), at 4:22–5:12.) The State’s counsel was referring to 2019 HB 316, or Act 24 (“**HB 316**”).

3. On April 2, 2019, Governor Kemp signed HB 316 into law. This new law mandates the implementation of a new uniform statewide voting system that uses

scanning ballots marked by electronic ballot markers and tabulated by using ballot scanners for voting at the polls and for absentee ballots cast in person unless otherwise authorized by law; provided, however, that such electronic ballot markers shall produce paper ballots which are marked with the elector’s choices in a format readable by the elector.

O.C.G.A. § 21–2–300(a)(2).

4. HB 316 requires that the BMD system, following its certification as “safe and practicable for use” by the Secretary of State, must be used in all federal, state, and county elections in Georgia “for voting at the polls and for absentee ballots cast in person.” O.C.G.A. § 21–2–300(a)(2); see also O.C.G.A. § 21–2–383(c).

5. On July 29, 2019, the Secretary issued notice of his intent to select the Dominion Voting System (EAC Certification Number DVS-DemSuite 5.5-A) (the “**Dominion BMD System**”), sold by Dominion Voting Systems, Inc., to be the new BMD system that will replace Georgia’s current, unconstitutional DRE voting system. (Docs. 552, 575.)

6. As shown below in this supplemental complaint, the Dominion BMD System cannot be safely or lawfully used. This is true because the system:

- does not meet Georgia’s legal requirements for a lawful voting system,
- shares the same kinds of security flaws as Georgia’s existing unconstitutional DRE voting system,
- has not been properly tested by the Secretary,
- was improperly certified and thus is illegal to use in Georgia,
- even if operated as designed, fails to produce verifiable, accountable, and auditable vote totals and election results,
- if used to conduct Georgia elections, will severely and unequally burden the constitutional rights of Georgia voters,
- if used to conduct Georgia elections, will deprive Georgia voters of their state constitutional right to a secret ballot, and

- cannot, in any event, practically be implemented within the time frame required to replace the constitutionally deficient DRE voting system, which this Court has ordered the State to discontinue using after the end of 2019. ([Doc. 579.](#))

7. Despite these deficiencies, the Secretary intends for Georgia to use the Dominion BMD System to conduct all elections that will be held in the State of Georgia beginning with (1) the pilot BMD elections for a limited number of November 5, 2019 elections; and continuing with (2) all elections from the March 24, 2020 presidential primary election onward (all of the foregoing-described elections, the “**Upcoming BMD Elections.**”)

8. At each of the Upcoming BMD Elections, the State Defendants and the Fulton County Defendants intend to enforce newly enacted [O.C.G.A. § 21-2-300\(a\)\(2\)](#) and § 21-2-383(c), both of which require all in-person voters—including absentee in-person voters and Election Day voters—to vote using the Dominion BMD System.

9. Because the Dominion BMD System suffers from numerous legal, functional, and security defects, it fails to satisfy any of the requirements that this Court has held to be essential to constitutional accountable voting processes.

10. This supplemental complaint seeks prospective preliminary and permanent injunctive relief prohibiting the Defendants in each of the Upcoming BMD Elections from employing the Dominion BMD System.

II. PARTIES

A. Plaintiffs

1. Plaintiff Coalition for Good Governance

11. The allegations stated by Paragraphs 18 through 23 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

2. Coalition's Member Plaintiffs

12. The allegations stated by Paragraphs 24 through 27 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

B. Defendants

1. Defendants Secretary of State

13. The allegations stated by Paragraphs 32 through 34 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

14. Defendant BRAD RAFFENSPERGER (“**Raffensperger**” or the “**Secretary**”) is now substituted for former Secretary of State Brian Kemp.

2. Defendant State Board Members

15. The allegations stated by Paragraphs 35 through 37 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

3. Defendant Fulton Board Members

16. The allegations stated by Paragraphs 38 through 39 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

III. JURISDICTION AND VENUE

17. The allegations stated by Paragraphs 41 through 45 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

IV. APPLICABLE LAW GOVERNING THE DOMINION BMD SYSTEM

A. 2019 HB 316's Key Changes to Georgia's Election Code

18. Following enactment of HB 316, Georgia's Election Code now requires that the "equipment used for casting and counting votes in county, state, and federal elections shall be the same in each county of this state and shall be provided to each county by the state, as determined by the Secretary of State." O.C.G.A. § 21-2-300(a)(1).

19. The voting system furnished by the State must be "a uniform system of electronic ballot markers and ballot scanners." O.C.G.A. § 21-2-300(a)(3).

20. HB 316 defines "electronic ballot marker"—the official term for a BMD—to mean:

an electronic device that that does not compute or retain votes; may integrate components such as a ballot scanner, printer, touch screen monitor, audio output, and a navigational keypad; and uses electronic technology to independently and privately mark a paper ballot at the

direction of an elector, interpret ballot selections,
communicate such interpretation for elector verification,
and print an elector verifiable paper ballot.

O.C.G.A. § 21-2-2(7.1).

21. HB 316 provides that the voting system using BMDs must: “Produce a paper ballot which is marked with the elector’s choices in a format readable by the elector.” O.C.G.A. § 21-2-379.22(6) (emphasis added)

22. According to HB 316, “[a]s soon as possible” after the Secretary certifies a new BMD system to be “safe and practicable for use,” “all federal, state, and county general primaries and general elections as well as special primaries and special elections in the State of Georgia shall be conducted with the use of scanning ballots marked by electronic ballot markers and tabulated by using ballot scanners.” O.C.G.A. § 21-2-300(a)(2).

23. HB 316 provides that, following the new BMD system’s certification as “safe and practicable for use” by the Secretary of State, BMDs must be used as the voting method “for voting at the polls and for absentee ballots cast in person” in all federal, state, and county elections in Georgia. O.C.G.A. § 21-2-300(a)(2);
see also O.C.G.A. § 21-2-383(c).

24. In such elections, the BMD system must be used “for voting at the polls and for absentee ballots cast in person, unless otherwise authorized by law.” O.C.G.A. § 21-2-300(a)(2).

25. The Election Code reinforces that in-person absentee voters must use BMDs by providing a second time that,

[I]n jurisdictions in which electronic ballot markers are used in the polling places on election day, such electronic ballot markers shall be used for casting absentee ballots in person at a registrar’s or absentee ballot clerk’s office or in accordance with Code Section 21-2-382, providing for additional sites.

O.C.G.A. § 21-2-383(c).

26. The requirement that voters use BMDs does not apply to absentee voters who do not vote in person. O.C.G.A. § 21-2-385(a). Absentee voters who do not vote in person are still able to vote on paper absentee ballots that must be returned by mail or personal delivery. *Id.*

B. Georgia’s Voting System Certification Process

27. BMD voting systems may not lawfully be sold by vendors or used in an election in Georgia until and unless the Secretary has certified that the BMD system “can be safely and accurately used by electors at primaries and elections.” O.C.G.A. § 21-2-379.24(b)–(d).

28. HB 316 provides that the State’s new uniform BMD voting system must be used for all state, federal and county elections in the State “[a]s soon as possible, once such equipment is certified by the Secretary of State as safe and practicable for use.” O.C.G.A. § 21-2-300(a)(2).

29. The Secretary has adopted a rule on Certification of Voting Systems that governs his certification of the Dominion BMD System. *See* Ga. Comp. R. & Reg. r. 590-8-1-.01 (Doc. 555, at 15-22, the “**Certification Rule**”).

1. **Qualification Testing**

30. The Certification Rule requires “qualification testing” as a prerequisite to certification of a new voting system for use in Georgia.

31. The Certification Rule provides:

Qualification tests shall be performed to evaluate the degree to which a system complies with the requirements of the *Voting Systems Standards* issued by the Election Assistance Commission (EAC).

Ga. Comp. R. & Reg. r. 590-8-1-.01(d).

32. The “Voting Systems Standards” referenced in the Certification Rule are the “Voting System Standards” (the “**2002 VSS**”), which were issued in 2002 by the Federal Election Commission (“**FEC**”) before the Help America Vote Act of 2002 transferred the FEC’s responsibility for developing voting system standards to the U.S. Election Assistance Commission (“**EAC**”).

33. The Certification Rule provides:

Whenever possible, Qualification tests shall be conducted by Independent Test Agencies (ITA) certified by the EAC. In the event that tests by an ITA are not feasible, these tests shall be conducted by a Georgia Certification Agent designated by the Secretary of State.

Ga. Comp. R. & Reg. r. 590–8–1–.01(d).

34. The Certification Rule provides that the requirement for qualification testing can be satisfied by EAC-issued Qualification Certificates that indicate the testing was performed by an EAC approved Independent Testing Agency. Ga. Comp. R. & Reg. r. 590–8–1–.01(d), (d)1.

35. If this level of testing is not available, then the Secretary may designate an agency to conduct qualification testing. Ga. Comp. R. & Reg. r. 590–8–1–.01(d)1.

36. “In either event, the Qualification tests shall comply with the specifications of the *Voting Systems Standards* published by the EAC.” Ga. Comp. R. & Reg. r. 590–8–1–.01(d)1.

37. The Dominion BMD System does not satisfy the Certification Rule’s requirements for qualification testing, and thus the system is not validly certified and is not legal to use in Georgia.

2. Certification Tests

38. The Certification Rule additionally and separately requires “certification testing”:

Certification tests shall be performed to certify that the voting system complies with the Georgia Election Code, the Rules of the Georgia State Election Board, and the Rules of the Secretary of State.

Ga. Comp. R. & Reg. r. 590–8–1–.01(d).

39. The evaluation procedure to obtain certification must be commenced after the qualification testing. *See* Ga. Comp. R. & Reg. r. 590–8–1–.01(d)2.

40. The Certification Rule requires that, “A Georgia Certification Agent designated by the Secretary of State shall conduct certification tests.” Ga. Comp. R. & Reg. r. 590–8–1–.01(d).

41. The Georgia Certification Agent is required to prepare an “Evaluation Proposal” to identify the testing to be done by the Georgia Certification Agent and any additional qualification testing that needs to be done by an EAC-approved Independent Testing Agency. Ga. Comp. R. & Reg. r. 590–8–1–.01(d)4.

42. The vendor then reviews the Evaluation Proposal and notifies the Secretary to proceed with the testing described in the Evaluation Proposal. Ga. Comp. R. & Reg. r. 590–8–1–.01(d)5.

43. Only after the vendor arranges for and successfully completes any required additional testing, then “the Georgia Certification Agent shall conduct the tests described in the Evaluation Proposal and submit a report of the findings to the Secretary of State.” Ga. Comp. R. & Reg. r. 590–8–1–.01(d)6.

44. The Secretary finally determines whether to certify the voting system for use in Georgia based on the “information in the report from the Georgia Certification Agent, and any other information in [the Secretary’s possession].” Ga. Comp. R. & Reg. r. 590–8–1–.01(d)4 & (d)7.

45. The Dominion BMD System does not satisfy the Certification Rule’s requirements for certification testing, and thus the system is not validly certified and is not legal to use in Georgia.

C. Functional Requirements for BMD Voting Systems

46. HB 316 establishes specific functional requirements for lawful BMD systems, including that BMDs and ballot scanners must at all times “[p]ermit voting in absolute secrecy so that no person can see or know any other elector’s votes, except when he or she has assisted the elector in voting, as prescribed by law.” O.C.G.A. § 21–2–379.22(5) (emphasis added); *see also* O.C.G.A. § 21–2–365(6) (same requirement to permit voting in absolute secrecy for ballot scanners

used in optical scanning voting systems); O.C.G.A. § 21-2-2(19.1) (defining optical scanning voting systems to include BMD systems that use ballot scanners).

47. These statutes reflect the Georgia Constitution's requirement that, "Elections by the people shall be by secret ballot and shall be conducted in accordance with procedures provided by law." Ga. Const. Art. II, § 1, ¶ 1.

48. Because of the constitutional imperative that voters must be able to verify the selections that BMDs make on their behalf, HB 316 provides that BMDs must "[p]roduce a paper ballot which is marked with the elector's choices in a format readable by the elector." O.C.G.A. § 21-2-379.22(6) (emphasis added).

49. HB 316 provides that, "The form and arrangement of ballots marked and printed by an electronic ballot marker shall be prescribed by the Secretary of State." O.C.G.A. § 21-2-379.23(b).

50. The Secretary's discretion to design the form and arrangement of ballots is constrained by the statute's specific requirements that BMD printouts must contain information that includes the following:

- "(4) Words identifying the proposed constitutional amendments or other questions for which the elector is eligible to vote." O.C.G.A. § 21-2-379.23(c)(4).

- “(5) The name of the candidate and, for partisan offices, indication of the candidate’s political party or political body affiliation, or the answer to the proposed constitutional amendment or other question for which the elector intends to vote.” [O.C.G.A. § 21-2-379.23\(c\)\(5\)](#).

51. HB 316 provides: “The paper ballot marked and printed by the electronic ballot marker shall constitute the official ballot and shall be used for, and govern the result in, any recount conducted pursuant to Code Section 21-2-495 and any audit conducted pursuant to Code Section 21-2-498.” [O.C.G.A. § 21-2-379.23\(d\)](#).

52. Nowhere does HB 316 contemplate that an “official ballot” might have both a human-readable part (the human readable text summary printed on the ballot card generated by the Dominion BMD System) and a non-human readable part (the QR code printed on the ballot card)—both of which purport to contain the same information, but only one of which (the human readable text portion) can be read and reviewed by the voter.

53. HR 316 is silent about what portion of the “official ballot”—the QR code or the human readable text summary—must be counted in the official count, in recounts, and in audits. *See* [O.C.G.A. § 21-2-379.23\(d\)](#).

54. The Dominion BMD System’s scanner only reads and interprets the portion of the ballot card that contains the QR code.

55. For the official count of votes—which is generated by tabulating the Cast Vote Records recorded on the precinct scanners after the close of an election—the Dominion BMD System only tabulates the information contained in the non-human-readable ballot card QR codes, not the voter-reviewable information contained in the human readable text summary.

56. For recounts conducted under O.C.G.A. § 21-2-495, the ballot printout cards are simply run through the scanners again. This means that the Dominion BMD System’s scanners—again—will only read and interpret the non-human-readable QR code, not the voter-reviewable human readable text summary.

57. By contrast, for precertification tabulation audits and risk-limiting audits conducted under O.C.G.A. § 21-2-498, the statute requires “manual inspection of random samples of the paper official ballots.”

58. Applicable audit standards are left to be determined by the State Election Board. *See* O.C.G.A. § 21-2-498(d). As of the date of this filing, the State Election Board has not promulgated any rules or procedures to implement precertification tabulation audits

59. A “manual inspection” of BMD printed ballots necessarily means that human auditors will have to examine the part of the printed ballot cards that contains the human readable text summary, not the part with the QR codes.

60. The statute’s requirement for the inspection sample to include “all types of ballots,” O.C.G.A. § 21-2-498(c)(2), means that, for in-person voters, precertification tabulation audits and risk-limiting audits will examine a different marking on a different part of the ballot than was counted for official tabulations, whereas for absentee paper ballot voters, these audits will examine the same marking on the same part of the ballot that was counted for official tabulations.

61. HB 316 does not provide for investigation of anomalies identified in precertification tabulation audits and risk-limiting audits to escalate the audit or correct the election results. The discovery of errors in the audited sample does not prevent certification of inaccurate official results or even permit a discretionary (much less automatic) manual inspection and recounting of all the ballots.

62. Nor does HB 316 contain any provision that addresses what markings on a BMD ballot—the QR code or the human readable text summary—should be counted in the event of an election contest. This omission is especially significant since an election contest is the most readily foreseeable result of an audit that produces evidence of an incorrect result.

63. In summary, the selections shown on the voter-reviewable, human-readable text summary portions of BMD ballot cards are never “counted.” Only the selections encoded by the QR code are tabulated and recounted. At most, only a sample of the human-readable text summaries on the ballot cards is ever used, and even that sample is only inspected to check the math produced by the prior tabulation of information contained in the indecipherable and unverifiable QR codes.

64. The human-readable portions of BMD ballot cards generated by the Dominion BMD System are essentially irrelevant to the actual tabulation of votes. The human readable text serves to give voters false comfort they may have verified their votes when in reality they cannot have done so. Elections in Georgia conducted using the Dominion BMD System will be decided from beginning to end by undecipherable QR codes that voters must trust and cannot verify.

65. By design, the Dominion BMD System forces Georgia voters to “trust the machine”—or, more specifically, to trust that the indecipherable QR code printed by the machine completely and correctly reflects the voter’s actual touchscreen choices. Even if the human readable text summary appears complete and correct to a voter with the time and ability to review it, the voter still must trust that the inscrutable QR code says the same thing as the summary.

66. This system is severely burdens the rights of voters, as described in Paragraphs 99–199 below, because (among other reasons) voters using the Dominion BMD System have no way of knowing what votes they are actually casting.

V. GENERAL ALLEGATIONS

A. How Voting Works on the Dominion BMD System

67. The Dominion BMD System consists of:

- the Democracy Suite 5.5-A Election Management System Version 5.5.12.1,
- EMS Adjudication Version 5.5.8.1,
- ImageCast X Prime (ICX BMD) Ballot Marking Device Version 5.5.10.30,
- ImageCast Precinct (ICP) Scanning Device Version 5.5.3-0002, and
- ImageCast Central (ICC) Scanning Device Version 5.5.3-0002.

68. The Secretary has erroneously claimed that the Dominion BMD System is a paper ballot voting system. The Dominion BMD System is actually an electronic voting system that is very similar to a DRE system, but is even less secure than DRE systems.

69. Paragraphs 70–88 describe the material steps performed by voters and officials when the Dominion BMD System is used.

70. The voter checks in and presents identification to pollworkers, who look up the voter using the ePollbook system.

71. Assuming the ePollbook confirms that the voter is in the right polling and eligible to vote, the pollworkers use the ePollbook software to encode and issue a voter access “smart” card to the voter.

72. The voter goes to an ImageCast X Prime (ICX BMD) Ballot Marking Device and inserts the voter access card into the BMD to activate it.

73. The BMD pulls up the ballot style assigned to the voter according to the voter access card and displays voting options on the touchscreen, one page after the other.

74. On each screen generated by the BMD, the voter expresses his or her electoral preferences by touching the target areas of the electronic screen that display voter’s choices.

75. The BMD interprets the voter’s physical pressure on various target areas of the touchscreen as votes. It converts the voter’s on-screen selections into temporary entries in the BMD’s memory to record the voter’s choices based on the context of what is being displayed to the voter when the screen is touched. When

the voter touches a target area, the BMD screen gives visual feedback to the voter to indicate that the voter's selection has been perceived by the BMD.

76. Once the voter has advanced through all the screens of the ballot style and is finished making selections, the BMD prints a paper record that is the voter's "ballot" and clears its memory of the selections that the voter has just made.

77. The "ballot" produced by the Dominion BMD System contains a "QR code"—a two-dimensional barcode that consists of black marks arranged in a square pattern on a white background. The "ballot" also contains a human readable text that summarizes the voter's touchscreen selections with a short, paraphrased label for each contest, followed by an indication of selection that was recorded as being made (or skipped) by the voter.

78. The following is a sample BMD ballot that Dominion provided in its RFP Response to the Secretary, showing both the QR code and a human readable text summary of the voter's choices:



([Doc. 555, at 13.](#))

79. The QR code is a machine-readable optical label that uses standardized encoding to store data efficiently. It is a type of matrix barcode first designed in 1994 for the automotive industry in Japan to track vehicles during the manufacturing process. The Dominion BMD System's QR codes contain information about the voter's choices, encoded in computer-readable form using a proprietary Dominion encoding format and may contain other information about

the voter as well. Because the encoding format is proprietary, even if the voter had a QR code reader, he or she could not decipher the information that the QR code contains and would not be able to understand it or verify whether it reflected his or her votes.

80. The human readable text portion of the ballot card generated by the BMD purports to summarize the voter's touchscreen selections by paraphrasing the affirmative selections (i.e., the voter's votes "for" electoral choices) that the BMD interpreted the voter to have either made, or skipped, on the touchscreen.

81. If a BMD is functioning properly, the vote selections that are encoded by the printed QR code should be the same as the vote selections that are described by the printed text summary, and both the QR code and the text summary should record the same selections that the voter previously made on the touchscreen prior to the ballot card being printed by the BMD.

82. Once the voter has received the ballot card printed by the BMD, he or she can (at least theoretically) review the human readable summary to check if it completely and correctly reflects the choices that the voter remembers making on the touchscreen. The voter will be unable to conduct any verification of the information encoded in the non-human readable QR code.

83. When the voter completes whatever review of the printed ballot card the voter wishes, is able, and has time to perform, the voter then takes the ballot card to the polling place ImageCast Precinct (ICP) Scanning Device and casts his or her ballot by inserting the printed ballot card into the scanner.

84. The scanner decodes the information contained in the QR code and constructs a complete record of all the voter's selections (the "**Cast Vote Record**"). The scanner saves the Cast Vote Record to two redundant removable compact flash cards along with a linked timestamp that identifies when the ballot card was cast and scanned.

85. At the end of voting, all the Cast Vote Records recorded by each polling place's scanner are transferred via removable media to the county's central tabulation center.

86. At the county tabulation center, the votes contained on all the Cast Vote Records are combined with tabulations from hand-marked paper absentee and provisional ballots to produce county vote totals in each contest, which are then transmitted to the State for the generation of combined election results by contest.

87. The ballot cards are transferred to the county's central tabulation center and retained there. In the event of a recount, the ballot card is available to

be scanned again—in which case the recount result, like the original tabulation, is based exclusively on the information contained in the QR code.

88. In the case of a pre-certification tabulation audit or a pilot risk-limiting audit, both of which require the manual inspection by humans of random samples of the ballot cards (as well as absentee paper ballots), the human readable text portions of each ballot card, rather than the QR code, is what will be examined. In other words, although the information contained in the non-human readable QR code is what gets counted in the initial tabulation and any recounts, it is the information in the human readable text summary portion of the ballot that gets manually inspected in audits of the election's results.

B. Certification and Award

89. A company called Pro V&V was engaged by the Secretary and conducted nominal “certification testing” of the selected Dominion BMD System in 2019.

90. Pro V&V was accredited as a voting system test laboratory by the EAC in 2015, but the 2015 certificate of accreditation expired on February 24, 2017.

91. On August 7, 2019, Pro V&V signed a Test Report stating that the Dominion BMD System had successfully been evaluated and certified against “the

requirements set forth for voting systems by the EAC 2005 VVSG and the State of Georgia.” (Pro V&V Test Report at 18.)

92. On August 9, 2019, the same day the Secretary awarded the BMD purchase to Dominion Voting Systems, Inc., the Secretary certified that the Dominion BMD System “has been thoroughly examined and tested and found to be in compliance with the applicable provisions of the Georgia Election Code and Rules of the Secretary of State, and as a result of this inspection ... can be safely used.” (Docs. 575, 575-2.)

C. The Dominion BMD System Is Constitutionally Defective and Not a Lawful Replacement for DRE System

93. As shown below in this supplemental complaint—and in flat contradiction to the Secretary’s certification—the Dominion BMD System cannot be safely (or lawfully) used. This is true because the system:

- does not meet Georgia’s legal requirements for a lawful voting system,
- shares the same kinds of security flaws as Georgia’s existing unconstitutional DRE voting system,
- has not been properly tested by the Secretary,
- was improperly certified and thus is illegal to use in Georgia,

- even if operated as designed, fails to produce verifiable, accountable, and auditable vote totals and election results,
- if used to conduct Georgia elections, will severely and unequally burden the constitutional rights of Georgia voters,
- if used to conduct Georgia elections, will deprive Georgia voters of their state constitutional right to a secret ballot, and
- cannot, in any event, practically be implemented within the time frame required to replace the constitutionally deficient DRE voting system, which this Court has ordered the State to discontinue using after the end of 2019. ([Doc. 579.](#))

94. On August 19, 2019, a petition was filed with the Secretary by all individual Coalition Plaintiffs and more than 2,500 Georgia voters from 127 different counties² pursuant to [O.C.G.A. § 21-2-379.24\(a\)](#), demanding that the Secretary re-examine the Dominion BMD System because of deficiencies in the initial certification examination. ([Doc. 586, at 10 \(Ex. A\).](#))

² This figure includes signatures and residences of voters added in one or more supplements to the petition after its initial filing.

95. As of the date of filing of this supplemental complaint, the Secretary has not responded to the voters' request and has set no timetable for conducting the required re-examination.

96. All public statements by the Secretary's office indicate that the Secretary has pre-judged that the required re-examination of the Dominion BMD System will not cause him to revoke his certification of the system or even slow implementation, despite the system's substantial non-compliance with voting system rules.

D. The Upcoming BMD Elections

97. In particular, the Secretary intends for Georgia to use the Dominion BMD System to conduct all federal, state, and county general primaries and general elections, as well as special primaries and special elections, that will be held in the State of Georgia beginning with (1) the pilot BMD elections for a limited number of November 5, 2019 elections and the continuing with (2) all elections from the March 24, 2020 presidential primary election onward (all of the foregoing-described elections, the "**Upcoming BMD Elections.**")

98. At each of the Upcoming BMD Elections, the State Defendants and the Fulton County Defendants intend to enforce newly enacted O.C.G.A. § 21-2-300(a)(2) and § 21-2-383(c). Those provisions require all in-person

voters—including absentee in-person voters and Election Day voters—to vote using the Dominion BMD System.

VI. REQUIRING VOTERS TO USE THE DOMINION BMD SYSTEM SEVERELY BURDENS THE RIGHTS OF GEORGIA VOTERS

A. The Dominion BMD System Forces In-Person Voters to Cast Ballots Without Being Able to Read or Verify The QR-Encoded Votes They Are Casting

99. The two types of ballot scanners certified by the Secretary as components the Dominion BMD System—

- ImageCast Precinct (ICP) Scanning Device Version 5.5.3-0002 (used in precincts), and
- ImageCast Central (ICC) Scanning Device Version 5.5.3-0002 (used for central counting of mail and provisional hand marked paper ballots).

—are programmed to read QR codes on ballot cards in the polling places and hand-marked paper ballots in the county election office.

100. The scanners interpret voter intent and create the Cast Vote Records that are used to tabulate election results.

101. Traditional hand-marked paper ballots contain colored-in oval target areas beside a human readable contest name. This target area is read by the optical scanners in the central count operation. For absentee mail-ballot voters and

provisional voters, the votes they can read and complete themselves are the votes that the scanners will count.

102. For in-person voters, only the votes encoded by the Dominion BMD System in the QR codes will be counted in the official tabulation and any recounts.

103. The information encoded by this QR codes is impossible for voters to read because the QR code is encrypted and encoded in a proprietary format that humans cannot decipher.

104. Voters are expected to review the text summary to satisfy themselves that the printed list of selections is the complete and accurate list of selections made on the touchscreen, and to report any machine malfunctions or discrepancies to poll managers. Even if a voter is able to satisfy himself or herself that the text summary actually reflects the preferences that the voter expressed when voting on the BMD touchscreens, this design still requires voters simply to trust that the non-human readable QR code matches the text summary. The voter has no way to confirm that this is true.

105. The voter's rights to cast a vote and to have that vote correctly recorded and counted entitle voters to a voting system that permit the voter to read the actual "official" votes being cast and to confirm that the "official" votes being

cast actually reflect the preferences that the voter expressed while interacting with the BMD touchscreen.

106. Voters may not legally be burdened with the requirement to conduct verification or machine accuracy testing in order to vote and have their votes counted. A voter should be permitted to simply vote without being expected or pressured to test the machine accuracy, particularly when the verification addresses a human readable text summary that is not even tabulated or recounted.

107. The design of the Dominion BMD System is inherently burdensome to voters and severely burdens voters' rights to vote and to have their votes counted.

108. The design of the Dominion BMD System also makes in-person voters less likely to cast an effective vote than absentee mail voters, who are allowed to vote on a paper ballot that the voter can mark without a computer intermediary, and with the confidence that they can see and read the vote they cast.

109. Mail ballot voters, who are allowed to cast hand-marked paper ballots, make their own ballot markings and thus do not need to perform any additional verification or accuracy testing to confirm that the marks on their paper ballot are in fact their own choices.

B. Many In-Person Voters Will Be Unable to Verify Even the Human Readable Text Portions of Their Dominion BMD Ballots

110. Because of the length and complexity of modern ballots, requiring voters to verify even a human-readable text summary of their touchscreen choices is a severe burden on the right to vote that will cause in-person voters to be less likely cast an effective vote than are mail absentee voters.

111. Many, if not most, in-person voters will lack the memory and cognitive skills to be able to verify that the printout produced by the Dominion BMD System has completely and correctly recorded their touchscreen selections.

112. This is true because of the way voting on BMDs works: When a voter makes an electoral selection by tapping a space on a BMD touchscreen, both the voter's physical act of expressing intent and the relevant context shown to the voter (i.e., the information being displayed by the BMD at that moment) are completely ephemeral. The confirmatory feedback that is displayed to the voter on screen once the voter has made a selection is also ephemeral.

113. Voters are prohibited from electronically recording for verification purposes any of the context and feedback surrounding their touchscreen choices by the Election Code itself, which forbids recording any photos or videos of BMDs in operation. *See* [O.C.G.A. § 21-2-413](#).

114. After all the voter's selections in all races on all voting screens have been completed (which in many elections takes a significant amount of time), when the BMD generates a printed paper "ballot" that contains both the QR code embedded with the voter's selections and a text summary of the voter's choices, the voter must rely exclusively upon his or her memory to review the text summary and confirm that it is complete and correct.

115. Auditing and voting system experts are in virtually unanimous agreement that in most elections, many, if not most, voters will be unable, from memory, without the benefit of any visual cues or context, to reliably, accurately, and completely verify the completeness and correctness of a paraphrased textual summary of the selections they previously made on the touchscreen over the course of potentially 5 or 10 minutes. For example, most voters are unlikely to detect if a low-profile down-ballot races or ballot question is left off the paper printout, or to notice if their votes were switched between "Yes" and "No" on a particular question.

116. Without every voter accurately verifying his or her complete ballot, BMD elections become unauditable because the ballot cards are not uniformly reliable as records of voter intent.

117. Many voters will skip trying to verify their ballots. Few voters, having already spent the time needed to mark an entire ballot while standing at a voting machine, after also standing in line waiting to vote, will choose to perform the relatively tedious and repetitive task of thoroughly reviewing the printed ballot card—particularly if they are aware that the State’s audit procedures are ineffective and that their verification efforts are pointless. The typical voter may simply assume that the QR code contains accurate and complete information, even if the printout appears to be incomplete. Many voters will just skip the verification altogether, particularly if there are lines behind the voter or other voters waiting to use the machine.

118. Requiring voters to perform a challenging, memory-based verification of a paraphrasing of their touchscreen vote selections in order to assure that the printed text summary accurately reflects the voters’ choices severely burdens the right to vote.

119. To the extent the voter’s act of verification is unnecessary to allow voters to cast an effective vote, it is a burden that lacks any justification. To the extent that verification is necessary, it is a burden that makes in-person voters less likely to cast effective votes than mail absentee voters, who are able to cast hand-

marked paper ballots without any additional step of having to confirm and verify the accuracy of a machine's translation of their electoral intent.

120. Fully accurate verification of the printed ballot content may be possible for a small minority of voters—those with high education levels, excellent memories, excellent English skills, no cognitive issues, and surplus time to spend at a voting machine studying a ballot card after already completing the ballot once. But less fortunate voters are more severely affected—especially disabled, elderly, less well-educated, non-native English-speaking, and cognitively challenged voters.

C. Ballots Cast on the Dominion BMD System Are Not Secret Ballots

121. The two types of ballot scanners certified by the Secretary as components the Dominion BMD System, *see supra* Paragraph 99, record a timestamp on the electronic record when a ballot is scanned. Of concern here is the ICP Precinct Scanner, which is the single scanner in a polling place that voters use to cast their ballots.

122. This timestamp is linked to the Cast Vote Record by the scanner.

123. Anyone who gains access to these timestamps can compare them to other information that is typically recorded about voters in a polling place—such as check in times, pollwatcher notes, and polling place video recordings—to

determine which timestamped ballot in the scanner was cast by which particular voter. The order and time of voters casting their ballots in a polling place is easily documented. It becomes relatively easy to selectively target any individual voter for exposure of their ballot simply by noting what time they cast their ballot into the scanner.

124. This determination of which Cast Vote Record belongs to which voter can be made with a nearly 100% certainty under many circumstances.

125. While Dominion claims to “anonymize” reported ballot data by suppressing the timestamps for external reports when the data is exported to public records, the original electronic records containing the timestamp and chronological order of ballots cast can continue to be accessed by insiders and successful hackers.

126. The timestamp design feature of the scanner components of the Dominion BMD System arbitrarily deprives in-person voters of their substantive Georgia constitutional and statutory rights to vote in absolute secrecy, which in turn violates federal constitutional guarantees of procedural due process.

127. The inability of in-person voters to enjoy their state rights to cast an absolutely secret ballot exposes these voters to the potential for identification,

retaliation, and accountability based upon their electoral choices, which also burdens the fundamental right to vote.

128. As voters learn of this threat to their privacy in voting, it will predictably deter voting by voters who may have reason to fear coercion or retaliation if their vote preferences are not absolutely secret. The existence of this vulnerability also creates a tempting target for hackers who trade in highly sensitive personal data.

129. Because mail ballot voters are allowed to return hand-marked paper ballots by personal delivery or by mail, rather than casting them into Dominion scanners, they are free from these deprivations and burdens—disparate treatment that, in turn, offends the right of in-person voters to equal protection.

D. The Dominion BMD System Does Not Create An Independent, Accountable Record of Voters' Choices

130. The Dominion BMD System does not create an independent, accountable record of voter choices that satisfies “democracy’s critical need for transparent, fair, accurate, and verifiable election processes that guarantee each citizen’s fundamental right to cast an accountable vote.” (Doc. 309, at 46, *Curling*, 334 F. Supp. 3d 1303, 1328 (Sep. 17, 2018).)

131. The inventor of risk limiting audits and the nation's foremost expert on post-election auditing, Professor Philip Stark, concludes that audits of BMD-generated results are "meaningless."

132. Twenty-four leading voting systems experts, cybersecurity experts, and election quality leaders echoed this concern in a letter to the SAFE Commission, noting that a valid BMD audit is "impossible."

133. Shortly after the passage of HB 316, Dr. Philip Stark, Dr. Richard DeMillo of Georgia Tech, and Dr. Andrew Appel of Princeton University published a paper called, "Ballot-Marking Devices (BMDs) Cannot Assure the Will of the Voters," which explains that the security model of BMDs is broken.³

134. Professor of Computer Science Dr. Wenke Lee, the Director of the Georgia Tech Information Security Center and the only cybersecurity expert on the SAFE Commission, voted against the SAFE Commission's recommendation to deploy BMDs for this reason.

135. Even the National Academy of Sciences has warned: "Unless a voter takes notes while voting, BMDs that print only selections with abbreviated

³ Andrew Appel, Richard DeMillo & Philip Stark, "Ballot-Marking Devices (BMDs) Cannot Assure the Will of the Voters" (April 21, 2019), *available at*, SSRN: <https://ssrn.com/abstract=3375755> (last visited Sep. 6, 2019)..

names/descriptions of the contests are virtually unusable for verifying voter intent.”⁴

136. BMDs, like DREs, allow a computer to author the artifact that constitutes the voter’s “official” vote selections. Because the Dominion BMD System deprives voters of any ability to read and verify the undecipherable QR code that contains the voter’s choices, the Dominion BMD System is a quintessential “black box”—the opposite of an accountable voting system.

E. The Design of the Dominion BMD System Deprives Officials of Any Way to Confirm Equipment Malfunctions

137. Because ballot cards are only printed after voters finish voting on their touchscreens, the Dominion BMD System exposes in-person voters to a higher likelihood than other voters that their votes will not be effective when and if a BMD in their polling place malfunctions.

138. BMDs interpose a delay between a voter’s ephemeral indication of intent and the voter’s review (on paper) of what was purportedly recorded. If the voter detects an error and reports a malfunctioning machine to a pollworker, there is no way for the worker to tell if the machine actually malfunctioned or if the

⁴ National Academy of Sciences, Securing the Vote: Protecting American Democracy (2018), at 79 (available at <https://www.nap.edu/catalog/25120/securing-the-vote-protecting-american-democracy>) (last visited Sep. 5, 2019).

voter is simply mistaken, since the paper printout will be the only potential evidence of the voter's touchscreen selections. Apart from the printout, no other evidence of the voter's ephemeral expression of intent exists that can be used to test the accuracy of the printout.

139. Many voters will be reluctant even to show pollworkers their ballot card to try to demonstrate the inaccuracies, because doing so will reveal their private ballot choices.

140. Since real-time polling place testing of BMDs for possible misconfiguration or hacking is impractical, pollworkers will be forced either to keep the potentially defective machine in service or to take voters at their word and take machines out of service, actions which will cause longer lines and delays.

141. If BMDs that voters report are malfunctioning are routinely taken out of service, there is a real risk of fabricated claims that BMDs are malfunctioning, claims that could bring a precinct to a stand-still and disenfranchise voters.

F. Audits Examine Different Expressions of Voter Intent Than Official Counts—But Only for In-Person Voters

142. HB 316 provides for precertification tabulation audits that are to be conducted by manual inspection of a random sample of official ballots.

143. Because the official ballots for in-person voters are BMD-printed ballot cards, the humans conducting the required “manual inspection” can

necessarily only examine the human readable text summary of any in-person ballot in the sample. In other words, the humans conducting the manual inspection cannot review the undecipherable QR code (which was counted in the official tabulation and any recount), but can only review the human-readable portion of the ballot.

144. By contrast, human auditors who conduct manual inspections of the hand-marked paper ballots cast by absentee voters will be able to examine the same portion of the absentee ballot that counted for the official tabulations and recounts.

145. In other words, the “official” BMD votes of in-person voters will be excluded from any chance of being included in any precertification audits, unlike the official votes of absentee paper-ballot voters. Since QR codes cannot be audited manually, they will not be audited at all in a manual inspection. The Dominion BMD System deprives in-person voters of the right to have their official votes audited that other voters enjoy under Georgia’s recount statute for BMD voting systems.

146. Apart from the unequal treatment of voters, the audits provided for by HB 316 are, in any event, ineffective and of limited value for confirming that election results actually reflect the intent of the electorate. Since the human-

readable text portion of the BMD ballots is unlikely to have been completely and correctly verified by all individual voters, manual inspection of ballot cards fails to assure overall integrity of the election. At most, “audits” of a BMD election can only confirm the arithmetical accuracy of tabulations—they cannot verify the fidelity of machine-printed ballot cards to voters’ actual touchscreen selections.

147. Audits of records that themselves are unverifiable by most individual voters may do more harm than good by leading the public to believe that election results have been “audited” in some meaningful way when, in fact, the opposite is true.

G. The Dominion BMD System Is Illegal To Use Because the Secretary’s Improper Certification of the System Is Void

148. The Secretary’s purported certification that the Dominion BMD System “has been thoroughly examined and tested and found to be in compliance with the applicable provisions of the Georgia Election Code and Rules of the Secretary of State, and as a result of this inspection ... can be safely used,” (Docs. 575, 575-2), is objectively false and legally void.

1. Qualification Testing Has Not Been Performed As Required By the Certification Rule

149. Georgia law requires state qualification testing for the Dominion BMD System unless the EAC has issued Qualification Certificates that certify the

system to comply with the *Voting System Standards*—i.e., the 2002 VSS. *See* Ga. Comp. R. & Reg. r. 590–8–1–.01(d).

150. The 2002 VSS provides a different set of standards than the guidelines stated by the 2005 VVSG (or by the 2015 VVSG).

151. Because the EAC has only certified the Dominion BMD System to comply with the guidelines set out in the 2005 VVSG, not the standards set out in the 2002 VSS, state qualification testing of the Dominion BMD System by the Secretary is required under the Certification Rule.

152. Pro V&V was accredited as a voting system test laboratory by the EAC in 2015, but the 2015 certificate of accreditation expired on February 24, 2017. The expiration of its EAC accreditation means that the “certification testing” performed by Pro V&V on the Dominion BMD System for the Secretary could not have been qualification testing.

153. In addition, Pro V&V in its own report described the testing that it performed as “certification testing,” not “qualification” testing.

154. Because Pro V&V did not perform qualification testing and because the Secretary has not designated a Georgia Certification Agent or engaged any other testing agency to conduct the required qualification testing, the Certification

Rule's requirement for qualification testing of the Dominion BMD System is not satisfied.

2. Certification Testing Has Not Been Performed As Required By the Certification Rule

155. The Dominion BMD System also does not satisfy the Certification Rule's requirements for certification testing.

156. The Certification Rule requires that, "A Georgia Certification Agent designated by the Secretary of State shall conduct certification tests." Comp. R. & Reg. r. 590-8-1-.01(d).

157. Pro V&V was never designated by the Secretary to be a Georgia Certification Agent.

158. Even if Pro V&V is construed to be acting as a Georgia Certification Agent without being designated as such in compliance with the Certification Rule, the certification testing that Pro V&V performed still does not meet the requirements for certification testing because Pro V&V's testing did not examine whether the Dominion BMD System "complies with the Georgia Election Code, the Rules of the Georgia State Election Board, and the Rules of the Secretary of State," Ga. Comp. R. & Reg. r. 590-8-1-.01(d).

159. For example, the testing did not include tests of whether the operation of the system would permit valid auditing of the results—a fundamental test that the system clearly would have failed.

160. The report prepared by Pro V&V shows that Pro V&V only examined the an incomplete set of functional operations of the Dominion BMD System and did not perform any of the kinds of “certification tests” that are required to “certify that the voting system complies with the Georgia Election Code, the Rules of the Georgia State Election Board, and the Rules of the Secretary of State.” Ga. Comp. R. & Reg. r. 590–8–1–.01(d).

3. The Secretary’s Certification of the Dominion BMD System Is Void and the System Is Not Legal to Use in Georgia

161. Because the Dominion BMD System was not properly tested according to the Certification Rule, the Secretary’s nominal certification that the Dominion BMD System “has been thoroughly examined and tested and found to be in compliance with the applicable provisions of the Georgia Election Code and Rules of the Secretary of State, and as a result of this inspection, ... can be safely used,” (Doc. nos. 575, 575-2), is objectively false—and thus is legally void.

162. In the absence of a valid certification that the Dominion BMD System “can be safely and accurately used by electors at primaries and elections,” the

Dominion BMD System may not lawfully be used to conduct a Georgia election.

O.C.G.A. § 21-2-379.24(b)–(d).

163. Requiring Georgia’s in-person voters to exercise their fundamental right to vote on a voting system that is illegal under state law violates the federal constitutional right to due process.

H. The State’s Electronic Security Practices Render the BMD System Even More Vulnerable to Hacking and Malicious Manipulation Than The DRE System Was

164. HB 316 provides for (ineffective) precertification audits of BMD election results, but the Dominion BMD System—like Georgia’s unconstitutional DRE voting system—suffers from security risks that cannot be mitigated by precertification audits.

165. The mere fact that the Dominion BMD System produces a paper printout with a human readable text summary that can be manually inspected in a precertification audit does not make it anything close to equivalent in security to a voting system that uses hand-marked paper ballots in conjunction with proper chain of custody practices and robust audits.

1. QR Codes Create Inherently High-Risk Applications

166. QR codes are a form of computer “barcode.”

167. Cybersecurity experts warn that use of a “barcode” application for voting systems is inherently dangerous.

168. One of the nation’s foremost voting system cybersecurity experts, Harri Hursti, testified to the U.S. Presidential Commission on Election Integrity on September 12, 2017:

When you read barcode, the problem is that barcode readers are usually a keyboard. So anything you can do with a keyboard you can do with a barcode. Barcode readers also have a bad habit of reading more standards than the standard you are using, and some of these barcodes can have a thousand, two thousand characters, and they can emulate the keyboard very effectively, so they can make those keyboard signs which are not-printable.

Again, when you're reading a barcode, you can get an injection code into the system with that, and this is one thing which we found in the voting machine hacking village is how you can inject in some of these machines a SQL inject from the barcode.

So these capabilities are very dangerous and we have to be very careful with the technology...”⁵

169. Secretary Raffensperger ignored such expert warning when he selected the Dominion BMD System and rushed to certify, without the benefit of

⁵ Testimony of Harri Hursti U.S. Presidential Commission on Election Integrity (Sep. 12, 2017), at 110 of 124, *available at* <https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Unedited%20Transcript%20for%20September%2012%2C%202017%20Meeting%20in%20New%20Hampshire.pdf> (last visited Sep. 5, 2019).

having done the required qualification and certification testing, that the system “has been thoroughly examined and tested and found to be in compliance with the applicable provisions of the Georgia Election Code and Rules of the Secretary of State, and as a result of this inspection, ... can be safely used.” (Doc. nos. 575, 575-2.)

170. The Dominion BMD System has not, in fact, been properly tested as required by the State Election Board’s own Certification Rule.

171. The Certification Rule mandates security qualification and certification testing, both of which should address the vulnerability of the Dominion BMD System’s vulnerabilities to injection of malicious code via barcodes.

172. But there is no evidence of any such vulnerability testing ever having been conducted, either by the EAC, by a Georgia Certification Agent, by the Secretary’s own staff, or by any other party prior to the Secretary’s rubber-stamp certification.

173. In August 2019, at DEFCON 27, a trade convention of white-hat hackers, several components of the Dominion BMD System were examined by participants and attendees. During the course of one weekend, the DEFCON “Voting Village” participants identified twenty vulnerabilities, including flaws that

specifically affect the scanners used by the Dominion BMD System—one of which even permits the redirection of votes from one candidate to another.

174. None of the “certification testing” of the Dominion BMD System conducted by Pro V&V addresses the vulnerabilities identified at the DEFCON 27 conference.

175. The Secretary’s intended use of the Dominion BMD System—an effectively untested voting system that is known to have inherent, publicly documented vulnerabilities—will place a severe burden on the fundamental right to vote of all in-person voters at the Upcoming BMD Elections and will cause those in-person voters to be treated differently than absentee voters who do not vote in person and thus are not required to use BMDs.

2. The Dominion BMD System Will Inevitably Be Exposed to Compromised Components of the DRE System That Have Still Never Been Examined for, Much Less Cleansed of, Malware

176. There is a risk that malware-infected components of the compromised and unconstitutional DRE system can be transmitted to the new Dominion BMD System if the two systems interface in way—meaning if direct or indirect physical and networked interaction occurs between any piece(s) of the old system and any piece(s) of the new system at any point in time, including by shared interfacing with intermediary equipment.

177. The State Defendants have denied that any data from the existing GEMS server and database will be imported for use with the new Dominion BMD System. ([Doc. 556.](#)) This is factually incorrect: The Dominion BMD System will be exposed at least indirectly to compromised components of the old system as the result of each system's separate interfacing with the Secretary's IT infrastructure over time. Accordingly, the new Dominion BMD System is susceptible to infection by malware from any part of the Secretary's current infrastructure.

178. The Secretary's current IT infrastructure is compromised because of the history of security breaches already documented and proven in this litigation. The following relevant allegations relating to such security compromises are adopted and restated here pursuant to Rules 10(b) and 10(c):

- Paragraphs 93–108 of the TAC ([Doc. 226, at 38–42.](#))
- Paragraphs 109–124 of the TAC ([Doc. 226, at 42–47.](#))
- Paragraphs 27–30 of the Curling Plaintiffs' proposed Third Amended Complaint (the “**proposed Curling TAC**”) ([Doc. 581-2, at 21–22.](#))
- Paragraphs 31–33 of the proposed Curling TAC ([Doc. 581-2, at 22.](#))
- Paragraphs 45–61 of the proposed Curling TAC (Doc 581-2, at 26–30.)

- Paragraphs 62–69 of the proposed Curling TAC (Doc 581-2, at 30–32.)

Despite these security lapses, the DRE system’s components have never been examined for, much less cleansed of, any malware. The State has taken no steps to correct or remedy the past exposure of its systems to hackers and adversaries.

179. In addition, in November 2018, erroneous results were officially reported in a small number of counties as a result of apparently defective electronic files.

180. Also, in 2019, the GEMS database contractors, who were working from unsecured facilities at their homes to build ballots for the State’s current, unconstitutional DRE voting system, transmitted sensitive database configuration files to CES (within the Secretary of State’s office) over the Internet, in contrast with Michael Barnes’s courtroom testimony, putting the CES election data servers at risk.

181. The DRE voting system and its components, including existing files, data sets, and auxiliary programs, can pass malware to the “new” servers and working files of the Dominion BMD System. As legacy GEMS files are converted or transferred to work with the new Dominion BMD System, they will carry with

them undetected malware or erroneous coding that will compromise the new system.

3. The State Has Still Not Improved Its Computer Security Practices, So New Exposures to Hacking and Malicious Manipulation Are All But Certain to Occur

182. The State has made no effort to address numerous system failures and irregularities that have marred the DRE system and rendered it insecure and unsafe to use in Georgia elections.

183. Even if the compromised components of the old system were not highly likely to compromise the new Dominion BMD System, the State's ongoing, systemically deficient security practices render the Dominion BMD System just as vulnerable and exposed to hacking and malicious manipulation as the DRE system.

184. Even if the midst of this litigation over the unconstitutionality of the DRE voting system, the Secretary still has not improved the computer security practices that he requires his staff, vendors, and contractors to observe.

185. Georgia law requires that, "All electronic ballot markers and related equipment, when not in use, shall be properly stored and secured under conditions as shall be specified by the Secretary of State." [O.C.G.A. § 21-2-379.26\(a\)](#). This requirement of state law continues to be violated by the unchanged security practices of the Secretary and his staff, vendors, and contractors.

186. Even after the adoption of the Dominion BMD System, the Secretary's ongoing deficient security practices will continue to impose a severe burden on the fundamental right to vote and effectively deprive in-person voters of equal protection and due process.

I. Implementation of the BMD System in Time to Conduct the Upcoming BMD Elections Is Impractical, Exposing Georgia Voters to Electoral Disaster

187. Successful implementation of the Dominion BMD System before the Upcoming BMD Elections is a practical impossibility.

1. The Scale of Georgia's Implementation Task Is Unprecedented

188. Georgia's installation of the Dominion BMD System will be the largest and most complex voting system conversion ever attempted in U.S. history.

189. The implementation will require the programming and installation of a new master software election management system and over 75,000 new computer-driven devices, including ballot printers and new electronic pollbooks and the successful integration of these many devices with Georgia's current, defective voter registration system. No state has ever attempted a simultaneous statewide conversion on such a scale. In addition, this conversion is being attempted during a presidential election cycle, which places additional demands and pressures upon the administration of the election.

190. Accomplishing this monumental task in time to use the Dominion BMD System in a constitutional manner in the Upcoming BMD Elections requires training, manpower, technical skills, and financial resources that are simply not available to the state and county officials who are collectively charged with the responsibility.

191. To attempt to accomplish this conversion in time for the presidential election cycle, the State will likely engage Dominion to program the election, install and test components, and provide significant hands-on operations in the field. The foreseeable involvement of the vendor in administering elections in this manner entails massive issues of conflicts of interests and will inevitably dilute the State's control over its own elections.

192. The foreseeable effects of a fully or partially failed voting system implementation will be catastrophic. A failed implementation will destroy voters' trust in the election system, will depress voter turnout by dissuading marginally motivated voters from suffering the burdens and inconveniences of untested and ad hoc remedial procedures, and will do severe and irreparable damage to Georgia's democracy by casting into question the integrity of the outcomes in all affected Upcoming BMD Elections.

193. The preliminary injunction order issued by this Court on August 15, 2019, requires the Defendants to prepare for their own potential failure to timely implement the use of the BMD equipment by developing a contingency plan to use hand-marked paper ballots in coordination with the Dominion BMD System's scanner components. (Doc. 579, at 148, ¶ (2).)

194. The Dominion BMD System's scanners, however, record timestamps permitting the voters' electronic ballot record to be connected to the polling place voter based on the time of voting.⁶ This threat can be mitigated and the integrity of the optical scanner tabulation can be ensured if the State's contingency plan either 1) requires Dominion to disable the timestamping capability, or 2) uses the State's existing AccuVote optical scanners and GEMS. Both of these alternatives would require conducting robust precertification audits of the hand-marked paper ballots.

195. Although the Court was clear that the purpose of the pilot ordered using hand-marked paper ballots in November 2019, was to help create a backstop in the event of an implementation delay or failure for the Dominion BMD System, the implementation plan for that pilot will be grossly insufficient to serve the intended purpose. The pilot is being implemented in just four small towns, in just

⁶ Coalition Plaintiffs warned State Defendants of this flaw in their March 24, 2019 Demand letter. (Doc 351, at 28, ¶ 4.)

one county, for one election day. The pilot should establish and document contingency processes and procedures, expand the new voting system infrastructure for ballot scanning, and permit multiple election directors to gain know-how with hand-marked paper ballots, which could well be required in 2020. The pilot was intended to provide practical experience to create a realistic, practical contingency plan. Given the implementation risk, and this immediate challenge to the implementation of the Dominion BMD system, the State should be required to initiate multiple pilot sites for hand-marked paper ballot elections utilizing the certified Diebold AccuVote scanners and Dominion ImageCast Scanners if the Dominion BMD System can be legally and satisfactorily certified (which would include the disabling of timestamps that violate Georgia's secret ballot protections.)

2. Implementation Will Inevitably Be Delayed By the State's Required Re-Examination of the Dominion BMD System

196. The citizen petition signed by the Member Plaintiffs for examination of the Dominion BMD System has made the Secretary aware of the clear deficiencies of his certification in detail, but the Secretary has thus far failed to respond to the petition either by curing those deficiencies or by rebutting them.

197. Because the Secretary did not perform qualification or appropriate certification testing, it is highly likely that his planned implementation of the

Dominion BMD System will not be possible on the timetable that is required to permit the BMD system to replace Georgia's current unconstitutional DRE system.

198. When the Secretary fails to implement the Dominion BMD System in time, Georgia voters will suffer severe burdens to their fundamental right to vote as a result of the electoral catastrophe that may ensue due to foreseeable voter and pollworker confusion with new and emergency procedures, long lines to vote, and inconsistent local implementations of election processes.

199. Because these harms are likely to occur if the Secretary persists in his commitment to an unworkable timetable for implementing the Dominion BMD System, the use of the system should simply be enjoined so that the coming months may be better spent transitioning to a practically workable—and constitutional—voting system.

VII. STANDING

200. Defendants' intended enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c) in the Upcoming BMD Elections threatens the Member Plaintiffs, other individual members of Coalition, and Coalition itself, with imminent injuries that confer standing on each of the Coalition Plaintiffs to bring each of the claims for prospective injunctive relief stated by this supplemental complaint.

A. Standing of the Member Plaintiffs

201. Each of the Member Plaintiffs has individual standing to bring each of the claims stated by this supplemental complaint because each intends to vote in each of the Upcoming BMD Elections in his or her respective county.

1. Imminent Threat of Injury-in-Fact

202. Individual Coalition Member Plaintiffs LAURA DIGGES, WILLIAM DIGGES III, RICARDO DAVIS, and MEGAN MISSETT will suffer an invasion of a number of legally protected interests, resulting in “concrete and particularized” injuries, if Defendants enforce O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c), requiring all polling-place voters to use the Dominion BMD System.

203. Specifically, for example, voters who vote using BMDs will be required:

- to cast a ballot that is individually traceable and not a secret ballot,
- to cast a ballot that cannot be read or verified by the voter and may not reflect the voter’s preferences, and
- to suffer a greater risk of casting a less effective vote than other similar situated voters who vote by mail.

204. Voters who avoid BMDs by choosing to vote by mail, on the other hand,

- will incur postage and transportation costs and will suffer inconveniences as a result of casting mail ballots,
- will be deprived of their ability to vote in their neighborhood polling places on election day,
- will be deprived of the ability to cast a fully informed vote by virtue of having to cast their votes earlier than other, similarly situated voters who may cast their votes on election day using BMDs;
- will incur the risk of their ballot being erroneously rejected without timely notice for cure.

205. These anticipated injuries satisfy the requirement of “immediacy” because they will occur within a fixed period of time in the future.

206. Suffering at least some of the anticipated injuries will be a certainty if the Coalition Plaintiffs vote in the Upcoming BMD Elections, whether by BMD or by mail ballot. No independent event—other than the act of voting itself—is needed to bring about some or all of the anticipated injuries to Coalition Plaintiffs.

2. Causation

207. The anticipated injuries to the Member Plaintiffs will be caused by the Defendants' enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c), requiring all polling-place voters to use the Dominion BMD System.

3. Redressability

208. An injunction against the Defendants' enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c) will redress the anticipated injuries by doing away with the requirement for all in-person voters to cast their ballots using the Dominion BMD System.

B. Standing of Coalition

209. Coalition has associational standing and organizational standing to bring each of the claims stated by this supplemental complaint.

1. Associational standing

210. The individual Members Plaintiffs LAURA DIGGES, WILLIAM DIGGES III, RICARDO DAVIS, and MEGAN MISSETT, and other individuals, are members of Coalition. By virtue of these members, Coalition has associational standing.

a) Members have standing to sue in their own right

211. The Member Plaintiffs and other individual members of Coalition are registered Georgia electors who intend to vote in their counties of residence in each of the Upcoming BMD Elections.

212. These individuals all face a probability of harm in the near and definite future as a result of the Defendants' anticipated enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c).

213. Each of the Member Plaintiffs and other members of Coalition who are registered Georgia electors thus have individual standing in their own right to bring each of the claims for prospective injunctive relief that are stated by this supplemental complaint.

b) Interests at stake are germane to organization's purpose

214. The interests at stake in the claims raised by this supplemental complaint are germane to Coalition's purpose of preserving and advancing the constitutional liberties and individual rights of citizens, with an emphasis on preserving and protecting the rights of its members that are exercised through public elections.

c) Neither claim nor relief requires participation of individual members

215. The claims stated by this supplemental complaint seek prospective injunctive relief so individual participation of Coalition's is not necessary.

2. Organizational standing

216. Coalition also has standing on its own because it will suffer injury to its organizational interests as a result of Defendants' anticipated enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c).

217. The allegations stated by Paragraphs 140 through 144 of the TAC are adopted here pursuant to Rules 10(b) and 10(c).

a) Injury-in-Fact

218. Defendants' enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c), requiring all polling-place voters to use the Dominion BMD System, will force Coalition to divert personnel, time, and resources to educating its members and the voting public about how to protect their rights to cast a secret ballot and an equally effective vote in the Upcoming BMD Elections; and will impair Coalition's ability to engage in the organization's other projects by forcing it to divert resources to counteract the Defendants' illegal acts.

b) Causation

219. These anticipated injuries to Coalition will be caused by the Defendants' enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c), requiring all polling-place voters to use the Dominion BMD System.

c) Redressability

220. An injunction against the Defendants' enforcement of O.C.G.A. § 21-2-300(a)(2) and O.C.G.A. § 21-2-383(c) will redress the anticipated injuries by doing away with the requirement for all in-person voters to cast their ballots using the Dominion BMD System.

VIII. CLAIMS

COUNT I: FUNDAMENTAL RIGHT TO VOTE

42 U.S.C. § 1983

**Claim for Relief from Threatened Unjustified and Untailored Infringements
of the Fundamental Right to Vote
In Violation of the First and Fourteenth Amendments**

***(Seeking Prospective Injunctive Relief
Against All Defendants in Official Capacities)***

221. The Coalition Plaintiffs incorporate and reallege each of the foregoing Paragraphs 1-220.

222. Defendants Raffensperger, the State Board Members, and the Fulton Board Members intend to employ the Dominion BMD System in the Upcoming

BMD Elections and to require in-person voters to cast their ballots using the Dominion BMD System.

223. Defendants' threatened conduct will severely burden Coalition Plaintiffs' fundamental right to vote as described in Paragraphs 99–199 above, including in the following ways:

- In-person voters will be unable to verify that their votes have been properly recorded in the QR code produced by the BMDs and used to tabulate the vote;
- In-person voters will be deprived of the benefit of having their official votes examined in precertification tabulation and risk-limiting audits because the QR codes on their official ballots are incapable of manual inspection;
- Traceability of ballot cards due to scanner timestamps will expose in-person voters to coercion and retaliation, which burdens them in freely voting their conscience; and
- All voters, including in-person and absentee mail voters, will be deprived of the right to participate in a trustworthy and verifiable election process that safely, accurately, and reliably records and

counts all votes cast and that produces a reliable election result capable of being verified as true in a recount or election contest.

224. Defendants' threatened imposition of these burdens and deprivations is neither justified by any legitimate governmental interest nor properly tailored to serve such an interest.

225. Defendants' threatened conduct will violate the fundamental right to vote protected by the First and Fourteenth Amendments to the United States Constitution.

226. In addition, Defendants' threatened conduct will violate the unconstitutional-conditions doctrine by requiring voters to suffer these severe burdens and infringements upon their constitutional right to vote as a condition of being able to enjoy the benefits and conveniences of casting their ballots in person at the polls.

227. Defendants will commit all the foregoing violations while acting under color of state law.

228. If an injunction does not issue against Defendants' intended conduct, Coalition Plaintiffs' fundamental right to vote will be violated, and the Coalition Plaintiffs will suffer irreparable injuries for which there is no adequate legal remedy.

COUNT II: EQUAL PROTECTION

42 U.S.C. § 1983

Claim for Relief from Threatened Violations of the Fourteenth Amendment's Guarantee of Equal Protection

(Seeking Prospective Injunctive Relief Against All Defendants in Official Capacities)

229. The Coalition Plaintiffs incorporate and reallege each of the foregoing Paragraphs 1–220.

230. Defendants Raffensperger, the State Board Members, and the Fulton Board Members intend to employ the Dominion BMD System in the Upcoming BMD Elections and to require in-person voters to cast their ballots using the Dominion BMD System.

231. Defendants' threatened conduct is fundamentally unfair because it will arbitrarily treat some voters, including the Member Plaintiffs and other members of Coalition, differently than other, similarly situated voters in the same elections, including at least in the following ways:

- Voters who cast their votes on the Dominion BMD System will be subjected to burdens on their federal constitutional rights as described in Paragraphs 99–199 above.

- Voters who cast their votes on the Dominion BMD System will be deprived of state rights to have their votes audited in state-law manual precertification tabulation and risk-limiting “audits”.
- Voters who cast their votes on the Dominion BMD System will be differentially deprived of underlying substantive state statutory and constitutional rights to vote by secret ballot.
- Voters who are similarly situated in all respects but who instead cast their votes on mailed paper ballots in the same election will be treated differently and will suffer none of the foregoing burdens, risks, and harms, including the inability to read and verify the votes they cast.

232. Defendants’ threatened conduct, which will impose the foregoing kinds of unequal treatment, will severely burden and infringe the Coalition Plaintiffs’ exercise of the fundamental right to vote, federal constitutional rights to freedom of speech and association, and Georgia constitutional right to vote by secret ballot.

233. Defendants’ threatened conduct is neither justified by a legitimate governmental interest nor properly tailored to serve such an interest.

234. Defendants’ threatened conduct will violate the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution.

235. In addition, Defendants' threatened conduct will violate the unconstitutional-conditions doctrine by requiring voters to suffer deprivation of the constitutional right to equal protection as a condition of being able to enjoy the benefits and conveniences of casting their ballots in person at the polls.

236. Defendants will commit all the foregoing violations while acting under color of state law.

237. If an injunction does not issue against Defendants' intended conduct, Coalition Plaintiffs' constitutional right to equal protection will be violated, and the Coalition Plaintiffs will suffer irreparable injuries for which there is no adequate legal remedy.

COUNT III: DUE PROCESS

42 U.S.C. § 1983

Claim for Relief from Threatened Violations of the Fourteenth Amendment's Guarantee of (Procedural) Due Process

(Seeking Prospective Injunctive Relief Against All Defendants in Official Capacities)

238. The Coalition Plaintiffs incorporate and reallege each of the foregoing Paragraphs 1–220.

239. Defendants Raffensperger, the State Board Members, and the Fulton Board Members intend to employ the Dominion BMD System in the Upcoming

BMD Elections and to require in-person voters to cast their ballots using the Dominion BMD System.

240. Defendants' threatened conduct is fundamentally unfair because it will severely restrict and/or arbitrarily and capriciously deprive the Coalition Plaintiffs' without proper notice of at least the following state-created liberty and property interests:

- The right of voters under Georgia statutes to have their official votes counted in an initial count.
- The right of voters under Georgia statutes to have their initial votes recounted in a recount or examined in an audit.
- The right of voters under Georgia statutes to cast their votes using a voting system that has been properly certified as safe for use.
- The right of voters under Georgia statutes to cast their votes on a voting system that is functionally compliant with Georgia law.
- The state statutory and state constitutional rights of voters to vote by secret ballot.

241. Defendants' threatened conduct is neither justified by a legitimate governmental interest nor properly tailored to serve such an interest.

242. Defendants' threatened conduct will violate the procedural requirements of the Due Process Clause of the Fourteenth Amendment to the United States Constitution.

243. In addition, Defendants' threatened conduct will violate the unconstitutional-conditions doctrine by requiring voters to suffer deprivation of the constitutional right to procedural due process as a condition of being able to enjoy the benefits and conveniences of casting their ballots in person at the polls.

244. Defendants will commit all the foregoing violations while acting under color of state law.

245. If an injunction does not issue against Defendants' intended conduct, Coalition Plaintiffs' constitutional right to equal protection will be violated, and the Coalition Plaintiffs will suffer irreparable injuries for which there is no adequate legal remedy.

IX. PRAYER FOR RELIEF

WHEREFORE, the Coalitions Plaintiffs respectfully request that this Court:

A. Enter a judgment finding and declaring it unconstitutional for any public election in Georgia to be conducted using the Dominion BMD System.

B. Enter a preliminary and permanent injunction prohibiting Defendants Raffensperger, the State Board Members, and the Fulton Board Members from

employing the Dominion BMD System to conduct any public election in Georgia, and enjoining the Defendants to employ a properly certified voting system using hand marked paper ballots as the standard method of voting, followed by statistically valid post-election, precertification audits.

C. Enter a preliminary and permanent injunction prohibiting Defendants from enforcing either O.C.G.A. § 21-2-300(a)(2) (2019), O.C.G.A. § 21-2-383(c) (2019), or any other law or regulation that requires Georgia voters to vote using the Dominion BMD System

D. Order that Defendants shall take all necessary action to ensure that there is no information recorded by any touchscreen machine or scanner (including a DRE electronic ballot, the encrypted ballot card of the BMD, and any other similar device), that, alone or in combination with other records or information, may be used to identify the individual who cast that ballot.

E. For all federal, state, and county elections conducted in Georgia using the Dominion BMD System, beginning with the November 2019 BMD pilot elections, order pre-certification testing of (1) the QR-code generated tabulations against the human-readable ballot selections on the ballot cards and (2) the fidelity of the unencrypted bar codes with the human readable ballots.

F. For the Court-ordered pilot election in November 2019 using hand-marked paper ballot, order the expansion of the pilot election to include at least ten counties in at least five different geographic areas of the State, using either the existing certified AccuVote optical scanners, or Dominion scanners if they can be properly certified. In addition, hand-marked paper-ballot pilot elections should also be held in any December runoffs of the November 2019 pilot elections.

G. For all federal, state, and county elections conducted in Georgia using the DRE voting system until the DRE voting machines are fully retired, order pre-certification audits of the computer-generated tabulations of optically scanned absentee mail ballots and tests of accuracy in recording the DRE output.

H. Beginning immediately, for all federal, state, and county elections conducted in Georgia using hand-marked paper ballots tabulated using optical scanners, including pilot elections, order pre-certification audits of election results, focusing on contested candidate races and ballot questions, with the plan for auditing to be based on applying well-accepted audit principles that assure a high probability that incorrect outcomes will be detected and remedied.

I. Retain jurisdiction to ensure all Defendants' ongoing compliance with the foregoing Orders.

J. Grant Coalition Plaintiffs an award of its reasonable attorney's fees, costs, and expenses incurred in this action pursuant to [42 U.S.C. § 1988](#); and

J. Grant Coalition Plaintiffs such other relief as the Court deems just and proper.

DATED: September 6, 2019.

Respectfully submitted,

/s/ Bruce P. Brown

Bruce P. Brown
Georgia Bar No. 064460
bbrown@brucepbrownlaw.com

Bruce P. Brown Law LLC
1123 Zonolite Rd. NE
Suite 6
Atlanta, Georgia 30306
(404) 881-0700

/s/ Robert A. McGuire, III

Robert A. McGuire, III
Pro Hac Vice ([ECF No. 125](#))

ROBERT MCGUIRE LAW FIRM
113 Cherry Street PMB 86685
Seattle, WA 98104-2205
Tel.: (253) 267-8530

Counsel for Coalition for Good Governance

/s/ Cary Ichter

Cary Ichter
Georgia Bar No. 382515
cichter@IchterDavis.com

Ichter Davis, LLC
3340 Peachtree Road NE
Suite 1530
Atlanta, GA 30326
(404) 869-7600

/s/ John Powers

John Powers
Pro Hac Vice (5/17/19 text-only order)

Ezra D. Rosenberg
Pro Hac Vice ([ECF No. 497](#))

Lawyers' Committee for Civil Rights
Under Law
1500 K St. NW, Suite 900
Washington, DC 20005
(202) 662-8300

*Counsel for William Digges III,
Laura Digges, Ricardo Davis
& Megan Missett*

Counsel for Coalition Plaintiffs

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER, ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

CERTIFICATE OF SERVICE

Pursuant to LR 7.1(D), I hereby certify that the foregoing document has been prepared in accordance with the font type and margin requirements of LR 5.1, using font type of Times New Roman and a point size of 14.

/s/ Bruce P. Brown
Bruce P. Brown

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION**

**DONNA CURLING, ET AL.,
Plaintiffs,**

v.

**BRAD RAFFENSPERGER , ET AL.,
Defendants.**

Civil Action No. 1:17-CV-2989-AT

CERTIFICATE OF SERVICE

I hereby certify that on September 6, 2019, a copy of the foregoing was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send notification of such filing to all attorneys of record.

/s/ Bruce P. Brown
Bruce P. Brown